FIG. 1A

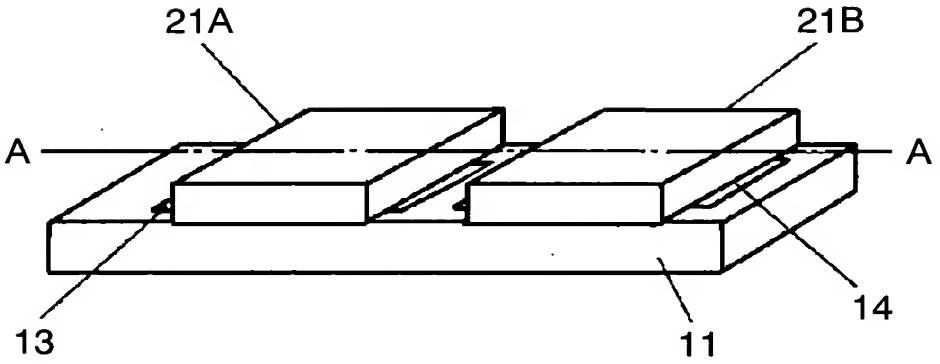



FIG. 1B

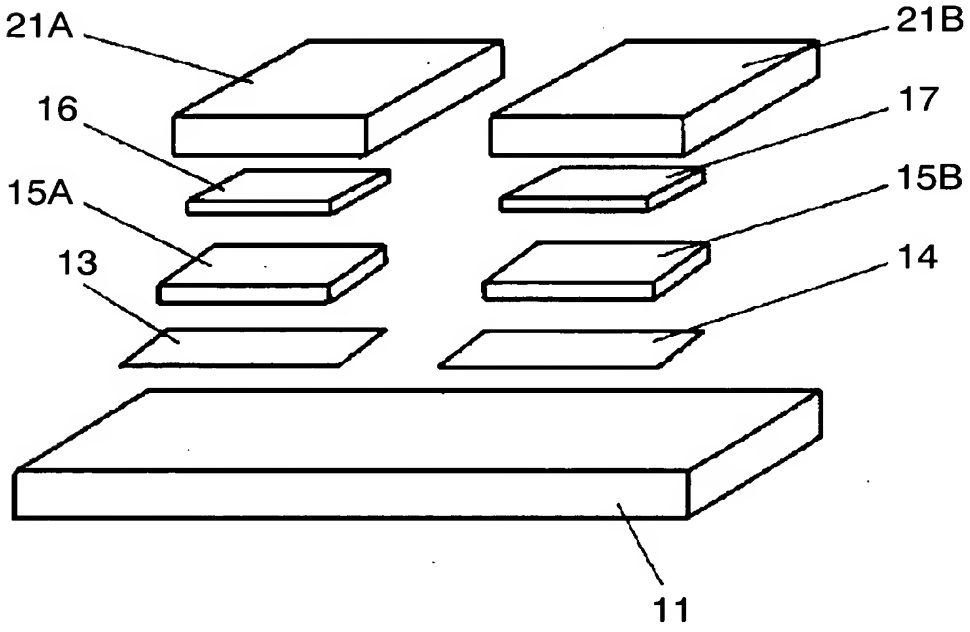


FIG. 2

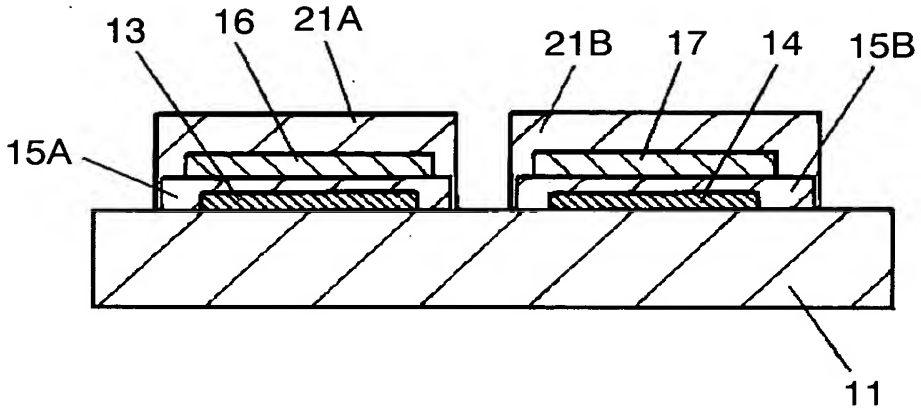

13
16
21A
21B
17
14
15B
15A
11

FIG. 3

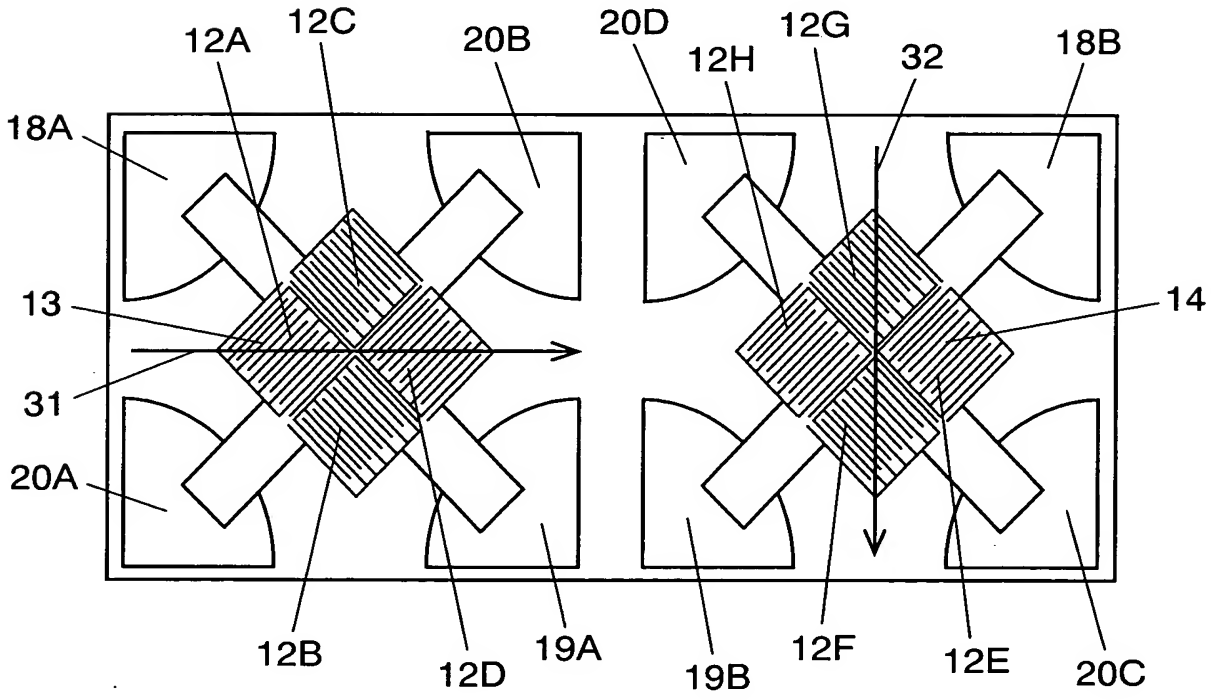

12A
12C
20B
20D
12H
12G
32
18B
18A
13
14
31
20A
12B
12D
19A
19B
12F
12E
20C

FIG. 4

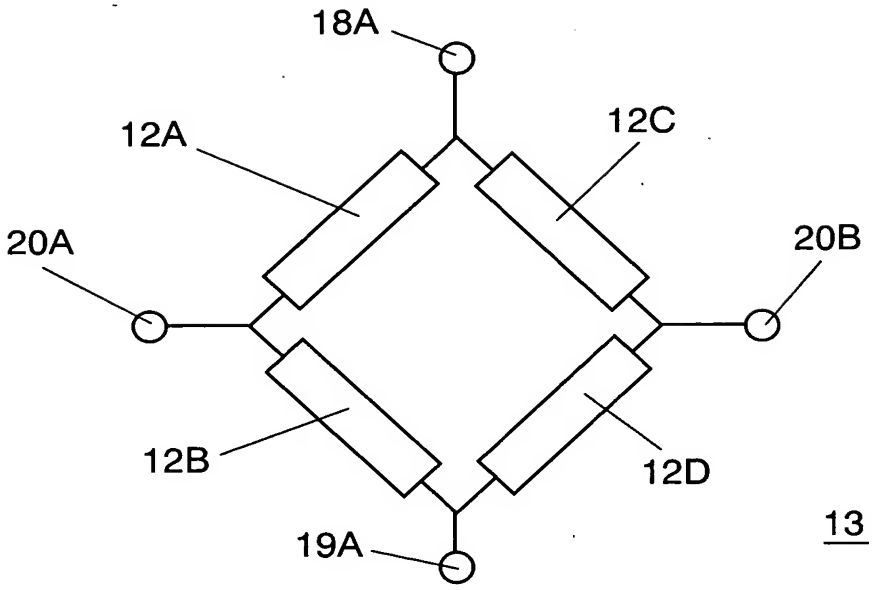

18A
12A
12C
20A
20B
12B
12D
19A
13

FIG. 5

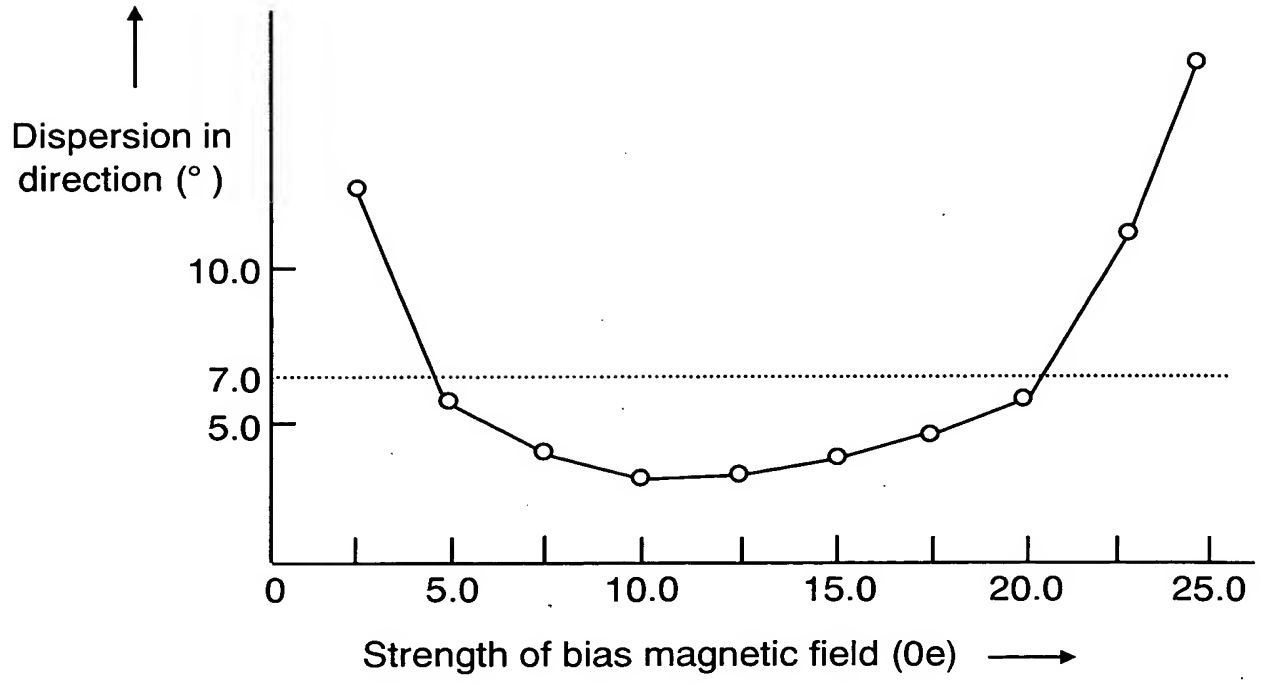

Dispersion in direction (° )
10.0
7.0
5.0
0
5.0
10.0
15.0
20.0
25.0
Strength of bias magnetic field (0e)

FIG. 6

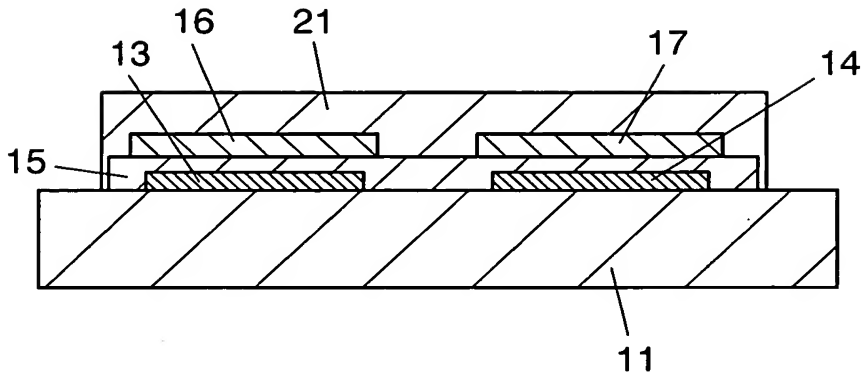



FIG. 7

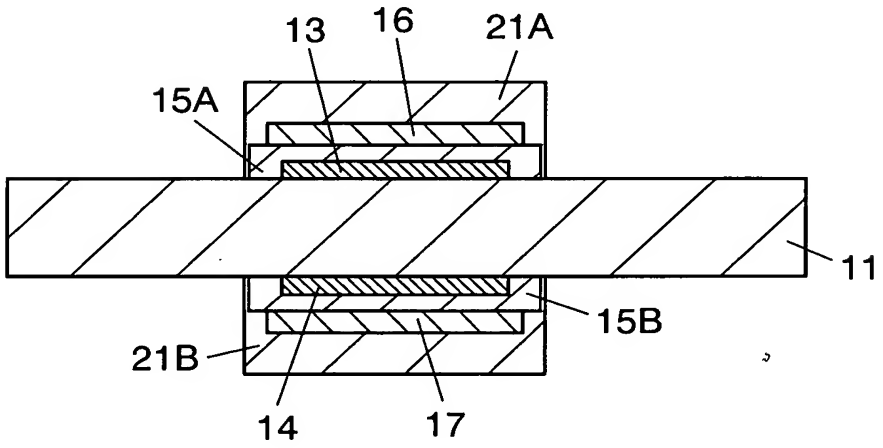


FIG. 8

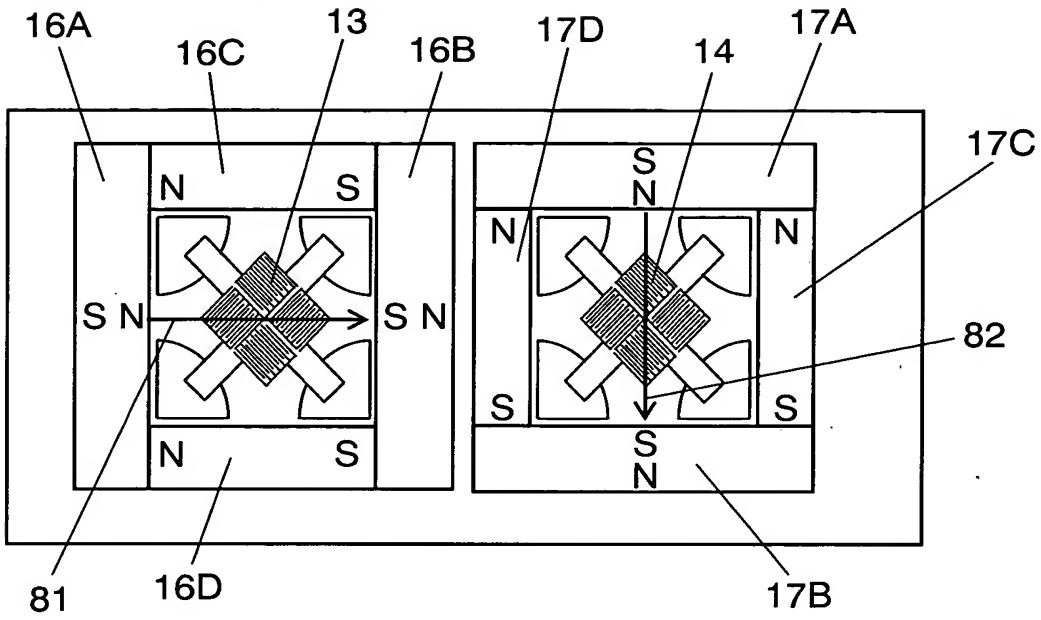

16A
16C
13
16B
17D
14
17A
17C
N
S
S N
S N
N
S
S N
S N
82
81
16D
17B

FIG. 9

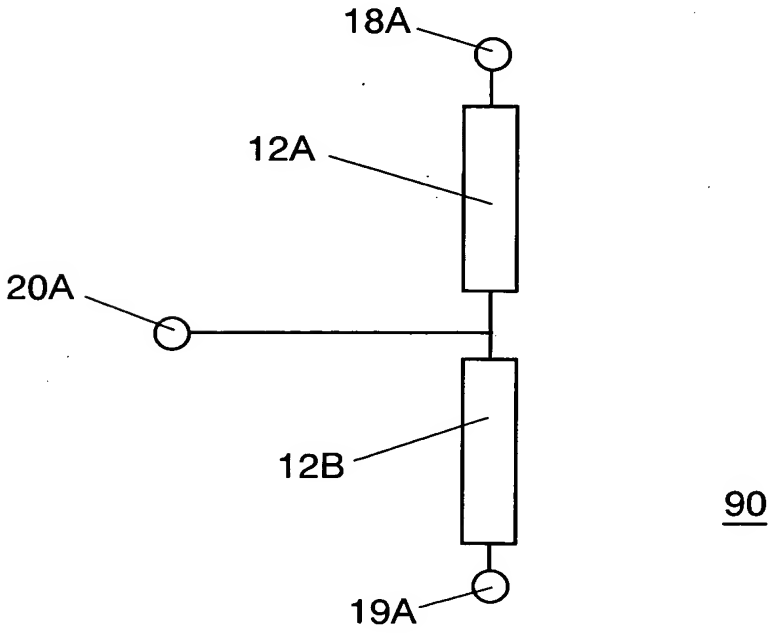

18A
12A
20A
12B
19A
90

FIG. 10A

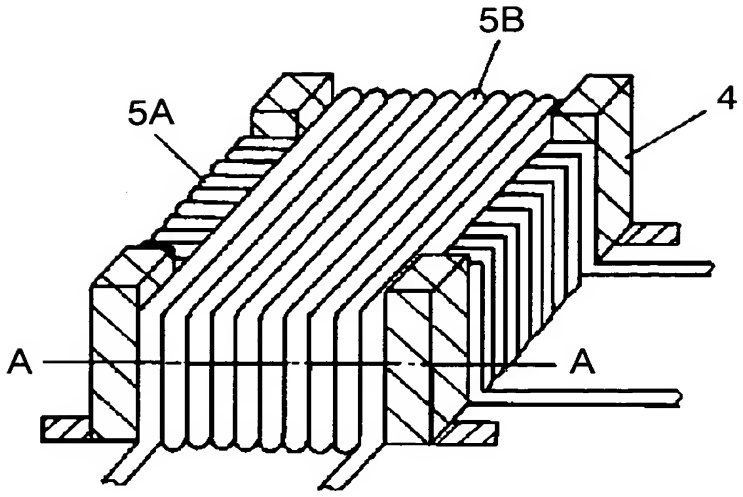
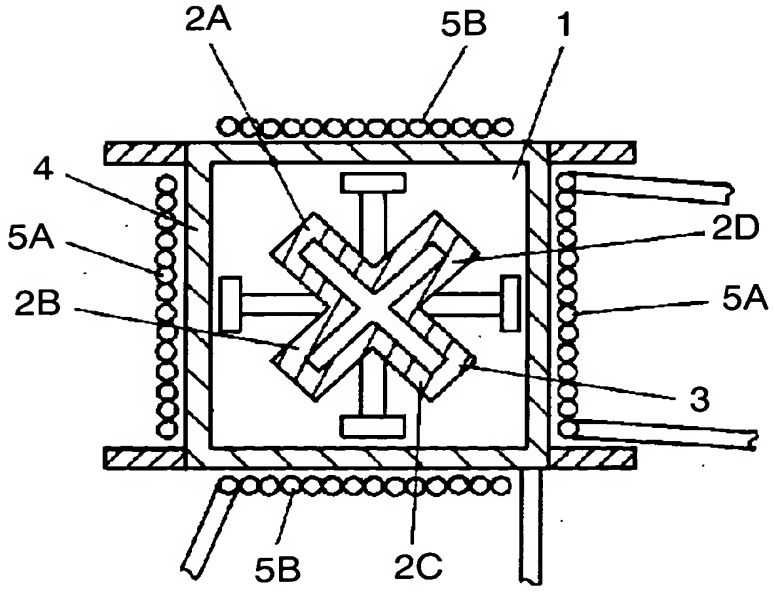



FIG. 10B



Reference marks in the drawings.

1. Substrate
2A, 2B, 2C, 2D. Detecting elememt
3. Bridge circuit
4. Holder
5A. First coil
5B. Second coil
11. Substrate
12A. Firest detecting element
12B. Second detecting element
12C. Third detecting element
12D. Fourth detecting element
12E. Fifth detecting element
12F. Sixth detecting element
12G. Seventh detecting element
12H. Eighth detecting element
13. First bridge circuit
14. Second bridge circuit
15, 15A, 15B. Insulating layer
16. First magnetic bias application part
16A, 16B, 16C, 16D. Magnetic bias application part
17. Second magnetic bias application part
17A, 17B, 17C, 17D. Magnetic bias application part
18A, 18B. Input electrode
19A, 19B. Ground electrode
20A. First output electrode
20B/ Second output electrode
20C. Third output electrode
20D. Fourth output electrode
21, 21A, 21B. Cover layer
31, 81. Magnetic field direction of first magnetic bias application part
32, 82. Magnetic field direction of second magnetic bias application part
90. First detecting circuit